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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------|-------------|----------------------|-----------------------|------------------|
| 10/579,807 | 05/16/2006 | Thomas Riermeier | 7601/88131 | 5944 |
| 66991 | 7590 | 07/19/2007 | EXAMINER | |
| LAW OFFICE OF MICHAEL A. SANZO, LLC | | | NWAONICHA, CHUKWUMA O | |
| 15400 CALHOUN DR. | | | | |
| SUITE 125 | | | ART UNIT | PAPER NUMBER |
| ROCKVILLE, MD 20855 | | | 1621 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 07/19/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/579,807 | RIERMEIER ET AL. | |
| | Examiner | Art Unit | |
| | Chukwuma O. Nwaonicha | 1621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05/16/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Current Status

1. Claims 14-33 are pending in the application.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 is rejected because the phrase "nucleofugic". The Examiner believes that applicants intend to write "nucleophilic". Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

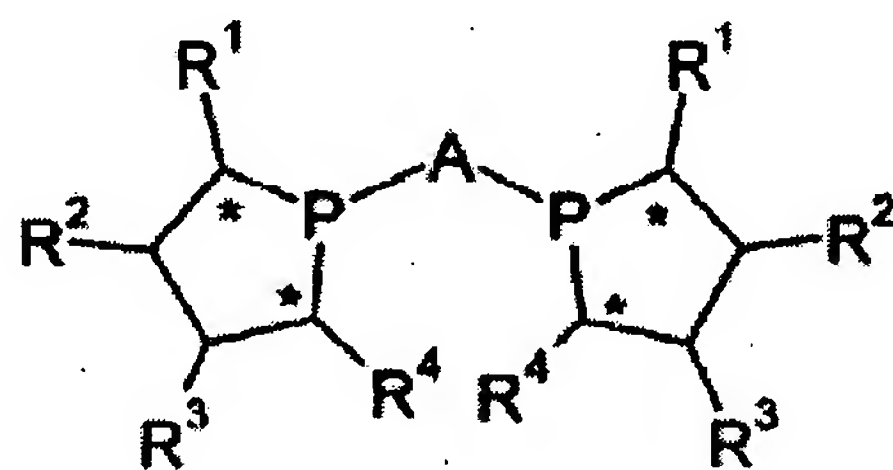
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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

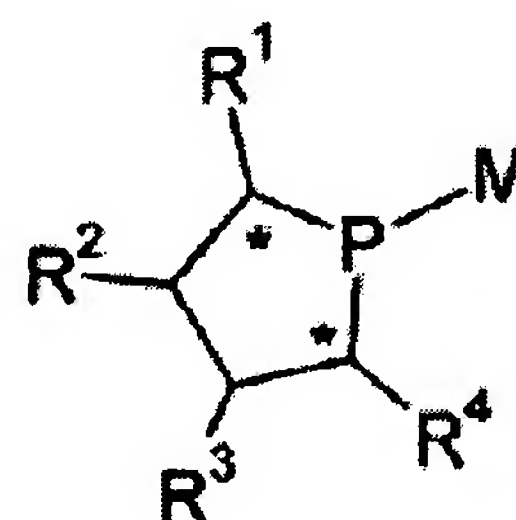
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 14-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borner et al., {WO 03/084971 A1} and Holz et al., {Synthesis of a New Chiral Bisphospholane Ligand for the Rh(I)-Catalyzed Enantioselective Hydrogenation of Isomeric β -Acylamido Acrylates, J. Org. Chem.; (Article); 2003; 68(5); 1701-1707}, when considered separately.

Applicants claim a process for preparing the compound of the general formula 1 by reacting compound of formula 2 with X-A-X; wherein all the variables are as defined in the claims.



formula 1

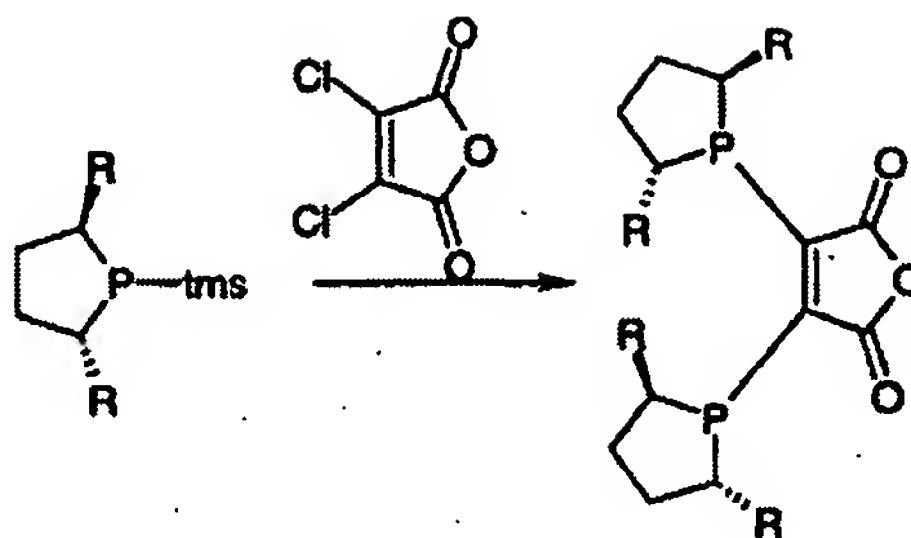


formula 2

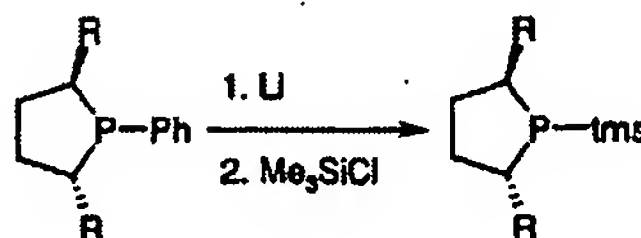
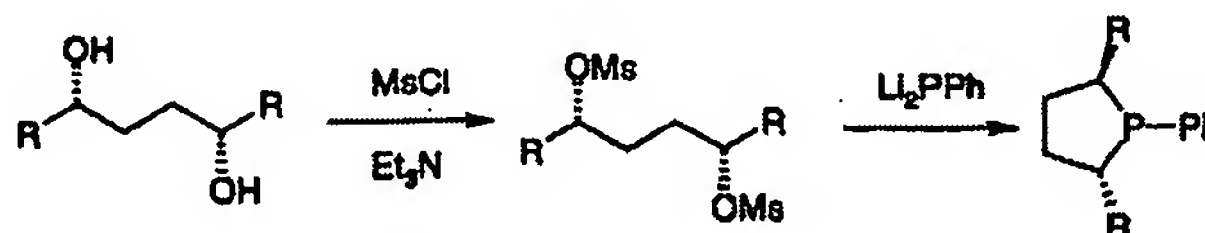
Determination of the scope and content of the prior art (M.P.E.P. §2141.01)

Borner et al. teach the process for the production of the compound of the general formula 1 as shown below. See pages 11-15.

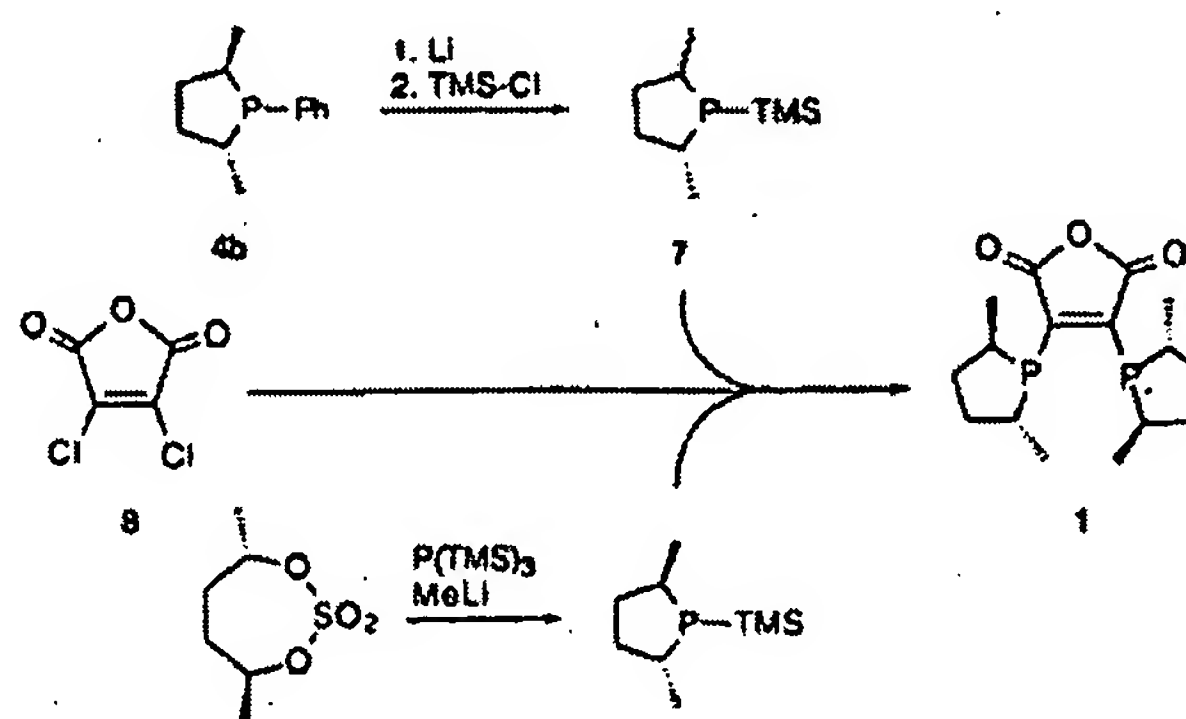
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Additionally, Borner et al. teach the process for the production of the starting material as shown below.



On the other hand, Holz et al. teach the process for the production of the compound of the general formula 1 as shown below.



Ascertainment of the difference between the prior art and the claims (M.P.E.P. §2141.02)

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Applicants process for making the compound of the general formula 1 differ from the process of Borner et al. and Holz et al. in that applicants claim a process that is conducted at a temperature ranging from -10 to 40°C while Borner et al. and Holz et al. teach a process that is conducted at a temperature between -78°C to 0°C .

Finding of prima facie obviousness--rational and motivation (M.P.E.P.. §2142-2143)

The instantly claimed process for preparing the compound of the general formula 1 would have been suggested to one of ordinary skill because one of ordinary skill wishing to obtain the compound of the general formula 1 is taught to employ the processes of Borner et al. and Holz et al.

One of ordinary skill in the art would have a reasonable expectation of success in practicing the instant invention by varying the process conditions of Borner et al. and Holz et al. to arrive at the instantly claimed process for preparing the compound of the general formula 1. Said person would have been motivated to practice the teaching of the references cited because they demonstrate that the compound of the general formula 1 is useful industrial chemical as a ligand. It should be noted that merely modifying the process conditions such as temperature and concentration is not a patentable modification absent a showing of criticality. In re Aller, 220 F.2d 454, 105 U. S. P. Q. 233 (C. C. P. A. 1955). Therefore, the instantly claimed invention would therefore have been obvious to one of ordinary skill in the art.

No Claim is allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne (Bonnie) Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chukwuma O. Nwaonicha, Ph.D.
Patent Examiner
Art Unit: 1621



ELVIS Q. PRICE, PH.D.
PRIMARY EXAMINER

Yvonne (Bonnie) Eyler
Supervisory Patent Examiner,
Technology Center 1600